

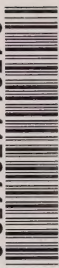


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SECTOR COMPETITIVENESS FRAMEWORKS

PRIMARY STEEL HIGHLIGHTS



**Industry
Sector**
Metals and
Minerals Processing

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Transformation
des métaux et minéraux

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Sector Competitiveness Frameworks are a new series of documents produced by Industry Canada in partnership with Canada's key industry stakeholders. *Overview and Prospects* focusses on the opportunities, both domestic and international, as well as on the challenges facing industry sectors in Canada. Consultations with major industry stakeholders, following study and review of the *Overview and Prospects*, may lead to a follow-up *Framework for Action* document.

The objective of the **Sector Competitiveness Frameworks** series is to seek ways in which government and private industry together can strengthen Canada's competitiveness and, in doing so, generate jobs and growth.

In all, some 29 industrial sectors will be analyzed. *Part 1 — Overview and Prospects* will be available for distribution in printed as well as electronic forms during coming months for the following industries:

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Electronic copies of *Primary Steel: Part 1 — Overview and Prospects* are available on the Internet at the following address: http://strategis.ic.gc.ca/primary_steel.scf

This Highlights document can be made available in alternative formats upon request.

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HIGHLIGHTS

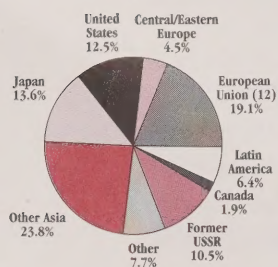
Canada's steel manufacturers are efficient and technically advanced, and they compete in a demanding international market. In recent years, this market has changed dramatically.

- The industry is a major export earner, accounting for \$3.02 billion worth of exports in 1995.
- Almost all of these exports go to the United States.
- Total shipments: \$10.69 billion in 1995.
- Jobs: 34 000 in 1995.
- The sector contributes substantially to the gross domestic product (GDP). This contribution, however, has decreased in the past 10 years, following a trend in other developed economies.
- The reason for this trend is that newly industrialized nations increase their steel consumption as they create the infrastructure of a modern economy. Other advanced economies like Canada, however, are experiencing rapid growth in the telecommunications, information technology and service sectors of the economy, which use little steel.
- The industry is almost entirely privately owned. It has experienced some government ownership in the past.
- Most of Canada's 14 steel producers are based in Ontario.
- Algoma Steel Inc., Dofasco Inc. and Stelco Inc. are the largest of these, producing almost three fifths of the national output. They operate integrated facilities equipped with blast furnaces and rolling mills.
- The smaller producers use electric arc furnaces (EAFs) and focus on carbon steel plate, sheet, bar and rod products, as well as specialty steels and stainless steel products.

Canada is the thirteenth largest producer of steel in the world, accounting for 2 percent of the world's supply.

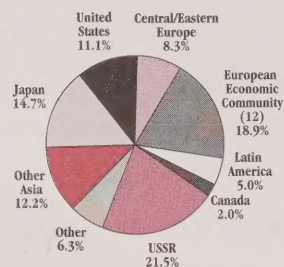
World Raw Steel Production

1995



Total: 748 million tonnes

1985



719 million tonnes

Source: Metal Bulletin, 1996.

- In 1995, no major supplier dominated the world market.
- Asian producers (in China, Japan, the Republic of Korea and Taiwan) account for more than one third of global output.
- The European Union and the U.S. are major suppliers.
- Russia is a principal supplier, but its production has decreased by half since 1985.

The 25 Top Raw Steel Producers, World, 1995

Company	Country of ownership	Ranking	1995 production (million tonnes)	% change 1995/1994
Nippon Steel	Japan	1	26.84	5.3
Posco	Republic of Korea	2	23.43	5.9
British Steel	United Kingdom	3	15.74	21.9
Usinor Sacilor	France	4	15.50	-16.2
Riva (including Ilva Group)	Italy	5	14.40	158.5
Arbed (including Stahlwerke Bremen)	Luxembourg	6	11.50	30.8
NKK	Japan	7	11.26	3.7
U.S. Steel	United States	8	11.03	4.2
Kawasaki	Japan	9	10.44	3.8
Sumitomo Metal Ind.	Japan	10	10.44	3.3
Thyssen	Germany	11	10.40	-2.8
SAIL	India	12	10.25	2.0
Bethlehem Steel	United States	13	9.46	6.5
BHP	Australia	14	8.53	0.9
Baoshan	China	15	8.22	13.1
Cherepovets	Russia	16	8.16	15.9
Anshan	China	17	8.13	-0.4
Shougang	China	18	8.00	-2.9
LTV Steel	United States	19	7.68	2.5
Magnitogorsk	Russia	20	7.62	4.0
Nucor	United States	21	7.14	8.0
Novolipetsk	Russia	22	7.04	25.7
Iscor	South Africa	23	7.00	1.3
China Steel	Taiwan	24	6.33	-1.7
Hoogovens	Netherlands	25	6.15	3.4

Source: Metal Bulletin, 1996.

Top Raw Steel Producers, Canada, 1995

Company	Country of ownership	Ranking	1995 production (million tonnes)	% change 1995/1994
Ispat Group ^a	Indonesia	26	5.96	19.2
Stelco	Canada	40	4.51	2.7
Gerdau ^b	Brazil	58	3.27	-2.1
Dofasco	Canada	74	2.54	7.6
Co-Steel	Canada	84	2.18	0.0
Algoma	Canada	91	2.02	-4.7

^a Ispat Group owns Sidbec-Dosco (Ispat) Inc. in Quebec.

^b Gerdau owns Gerdau Courtice Steel Inc. in Ontario and Gerdau MRM Steel Inc. in Manitoba.

Source: *Metal Bulletin*, 1996.

- Canada benefits from its proximity to the U.S., a major global supplier and a sophisticated steel user. We supply a wide range of advanced steel products, including “just in time” deliveries across the U.S.
- Canadian mills generally cannot compete profitably outside North America, mainly because of high transportation costs and non-tariff barriers.

With over 90 percent of Canadian steel exports going to the U.S., access to the American market is vital.

- The industry urges government attention to legislation surrounding unfairly traded products.
- Given the Canada–U.S. Free Trade Agreement (FTA) and the North American Free Trade Agreement (NAFTA) among Canada, the United States and Mexico, the North American market is becoming increasingly integrated.
- In such a free trade area, the use of anti-dumping practices and countervailing duties to resolve allegations of unfair trade is inappropriate and unnecessary.
- Intergovernment discussions seeking to amend or eliminate existing trade remedy legislation have made little progress. The NAFTA governments — especially the U.S. — appear unwilling to change their position on this matter.
- Despite its disappointment, the steel industry is pressing the Canadian government to pursue the matter with Mexican and U.S. governments and, in the interim, to consider changes to its own trade remedy legislation and procedures. At issue is ensuring that the Canadian industry receives no less protection from unfairly traded products than its U.S. counterparts.

Investing heavily in steelmaking equipment, domestic producers in some instances are ahead of their U.S. counterparts in the deployment of modern technology and processes.

- Canadian steel manufacturers produce a range of steels, most of which did not exist seven years ago.
- Established to enhance the industry's competitiveness, the Canadian Steel Industry Research Association (CSIRA) is an association of steel companies promoting facilities for and expertise in iron and steel research.

The appearance of high-quality steel producers in the developing world has stimulated international trade in steel.

- No longer the exclusive preserve of industrialized nations, steel manufacture is carried out in 56 countries.
- Short-term market outlook:
 - The market is expected to remain strong with improved North American demand for steel.
 - Competition will come from low-cost and/or government-subsidized offshore suppliers, as well as U.S., Canadian and Mexican producers.

■ Long-term market outlook:

- EAF-based mini-mills will increasingly compete with integrated mills.
- These mini-mills lower the capital cost barriers to entry of new mills into the steel industry; they will offer a wider range of (flat) products than at present.
- Industry observers expect the distinction between integrated and mini-mill operations to blur in coming years.
- The number of steps in the steelmaking process is shrinking, delivering lower costs, better yields and a more uniform product.

New types of steel have helped the industry to recapture applications in the automobile market. New markets include residential home construction.

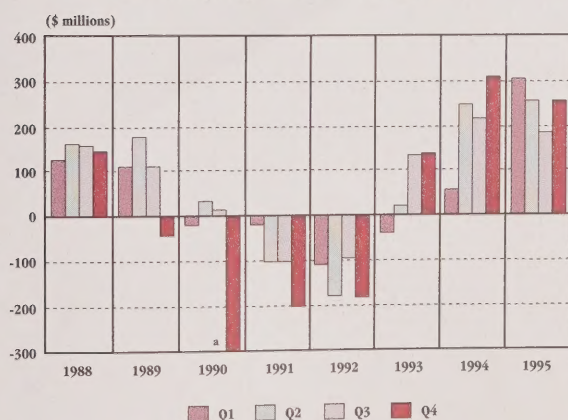
- The automobile market is a major consumer of steel in North America, but plastic, aluminum, magnesium and carbon fibre components have replaced steel in some applications in this market.
- The steel industry is recapturing some applications with new high-strength and more corrosion-resistant steels. This trend will likely continue.

- The industry is targeting the residential home construction market, seeing market potential in all of Canada, the U.S., Mexico, Europe and Japan.

The primary iron and steel industry's annual capital spending has almost doubled since the early 1990s.

- Between 1980 and 1995, the industry as a whole invested \$7.8 billion in new plant and equipment to reduce manufacturing costs and improve product quality.
- The industry returned to profit in 1994-95, prompting annual investment to double from its low point in the early 1990s. This investment is designed primarily to increase (or replace) steelmaking capacity and to upgrade finishing facilities.

Net Profit (Loss), Canadian Steel Industry



^a Actual net losses for the 1990 fourth quarter were \$1.42 billion and are not displayed for reasons of scale. The loss resulted from extraordinary items, including the Dofasco writedown of its Algoma investment and Algoma's revaluation of assets.

Source: Statistics Canada, Catalogue No. 61-008, quarterly.

The industry has increased its competitiveness through downsizing, skills upgrading and an overall reorganization of its work practices.

- The industry has downsized from 50 000 employees to about 34 000 in the past 10 years.
- At the same time, productivity is increasing because:
 - employees are upgrading their skills to handle increased automation in the production plants
 - employers are planning to double their training budgets for the next three years to introduce new work methods and train workers for this new environment
 - management is reducing layers of hierarchy, thus encouraging teamwork and empowering employees.
- Increasingly progressive management/labour relations are leading to fewer work stoppages and improved operating efficiencies.
- Average industry incomes are substantially above the Canadian norm.

In recent years, Canadian steel mills have reduced emissions significantly.

- Future plans include curtailing the release of substances deemed to be toxic.
- The industry's ongoing efforts to improve its environmental performance will affect integrated mills, whose coke ovens and blast furnaces emit harmful substances. By comparison, EAFs generate few environmental problems.

Industry Canada's Framework for Action for the primary steel sector will consider numerous issues of particular importance to the future of the industry including:

- maintaining unimpeded access to the U.S. steel market
- ensuring Canada's position as the NAFTA investment location of choice for steel mills
- meeting environmental responsibilities without jeopardizing competitiveness
- sustaining low interest rates to permit access to reasonable priced sources of capital
- removing interprovincial barriers to trade
- continuing adaption to a customer-driven market.

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